

# **Survivability of Accidents Involving Part 121 U.S. Air Carrier Operations, 1983-2000**



**National Transportation Safety Board**

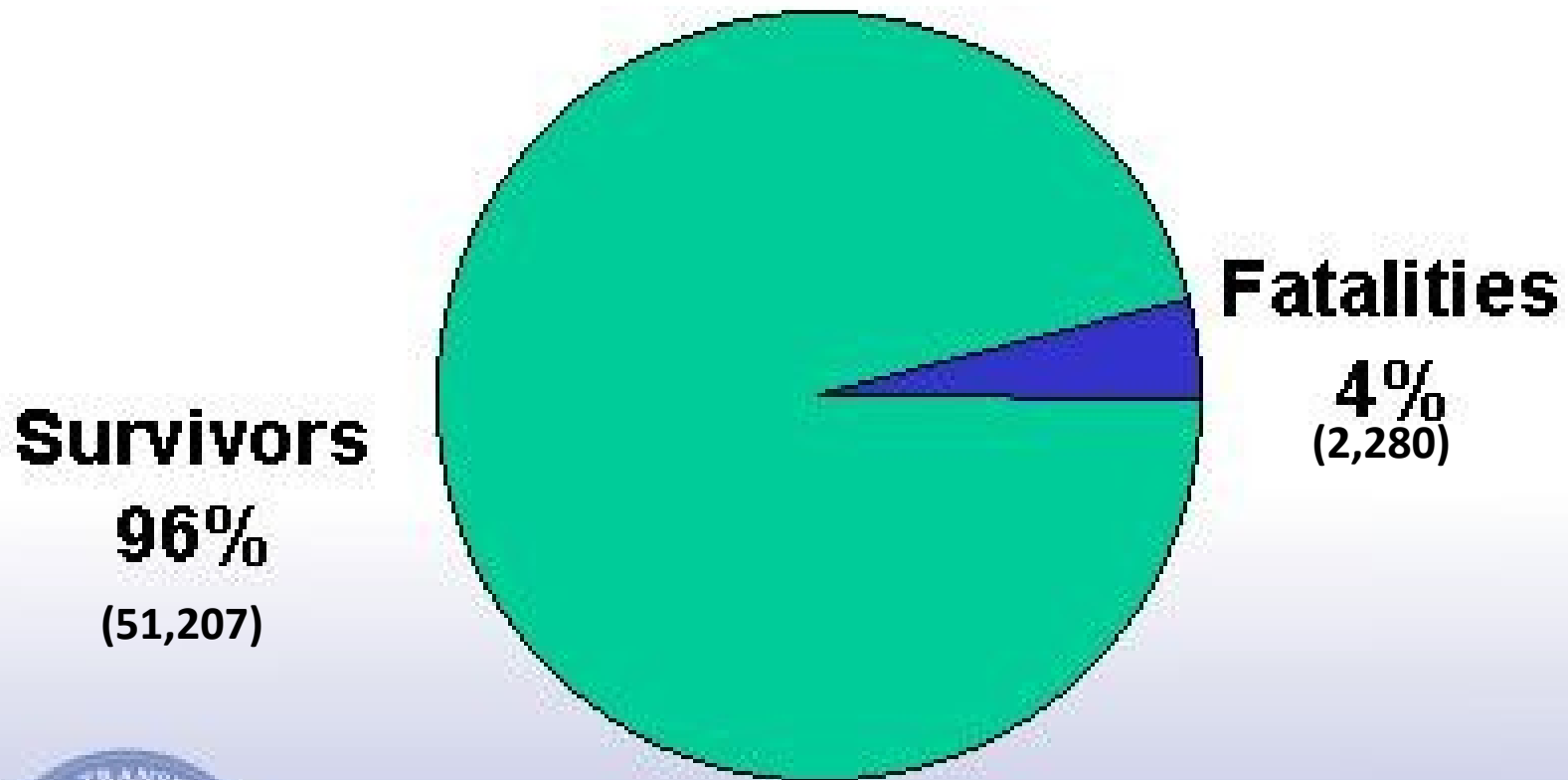




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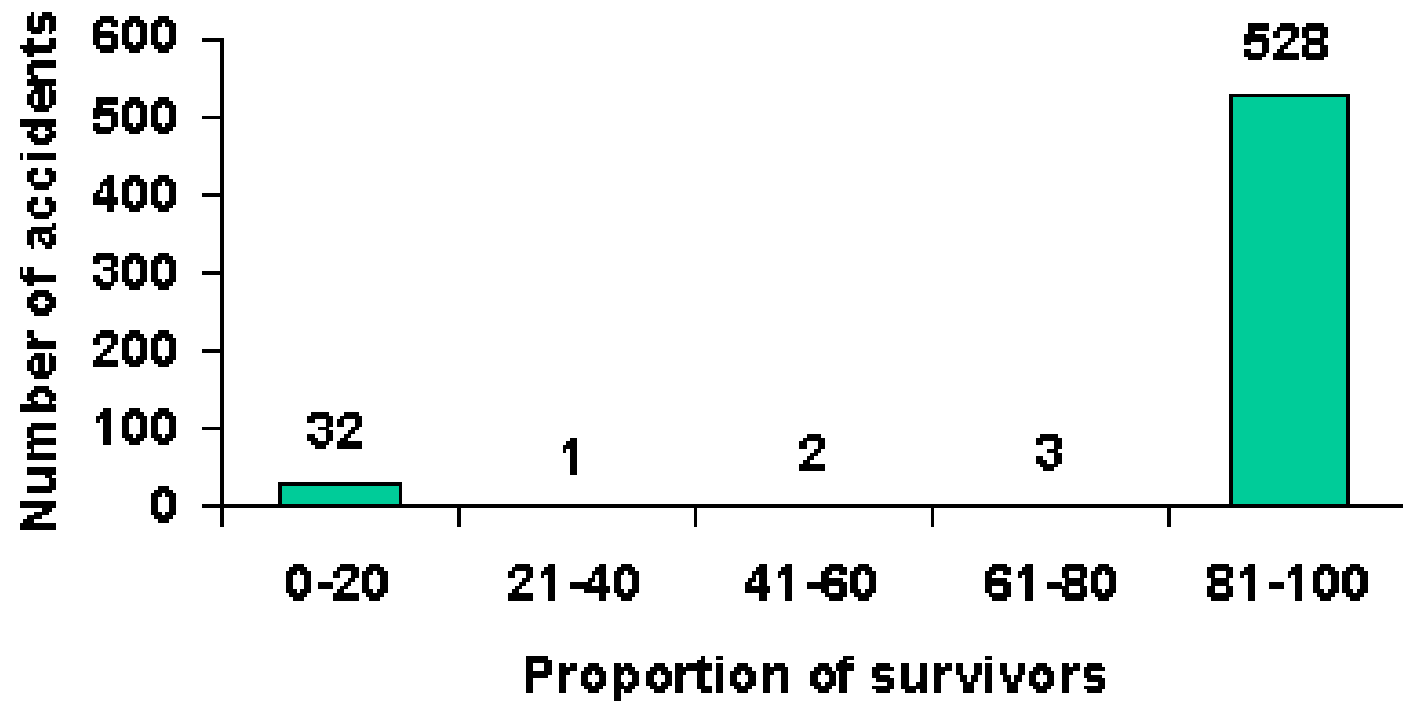


# Occupant Survival for All Part 121 Accidents



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# Number of Part 121 Accidents with Proportions of Survivors



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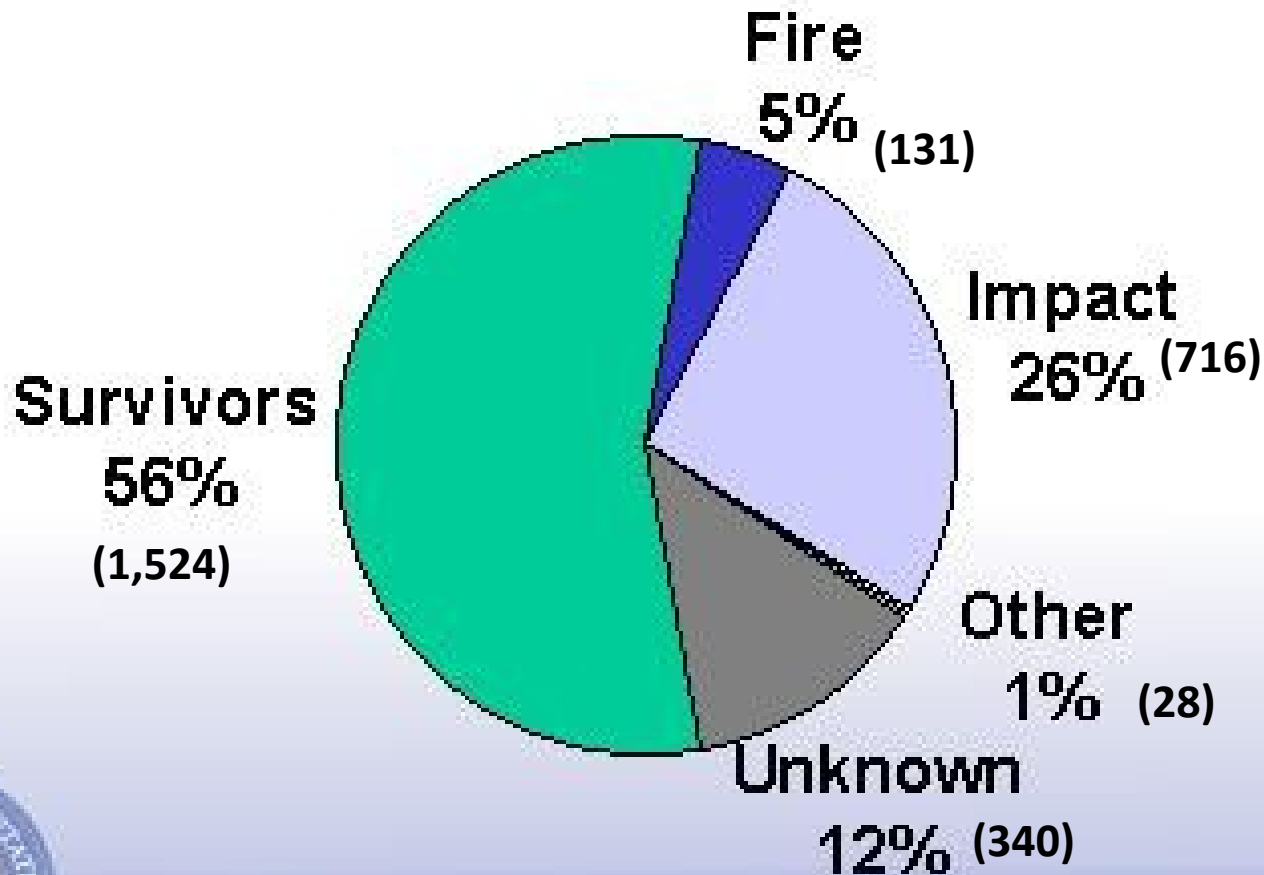
# Report Definition of a Serious Accident

- At least one serious injury or fatality
- Substantial damage or complete destruction of an aircraft
- Fire (Pre-crash or Post-crash)



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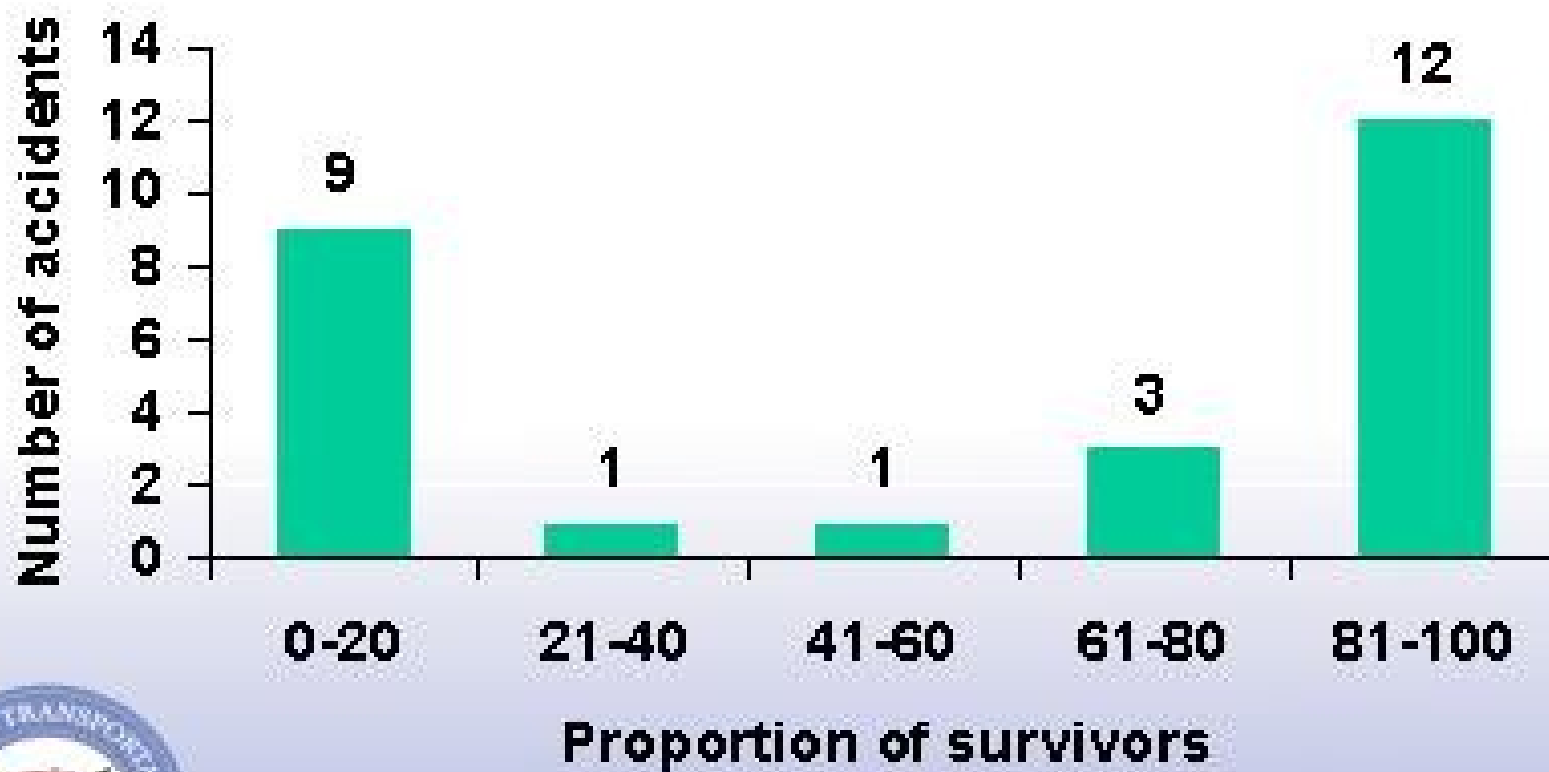
# Occupant Survival for Serious Part 121 Accidents



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## Number of Part 121 Serious Accidents with Proportions of Survivors



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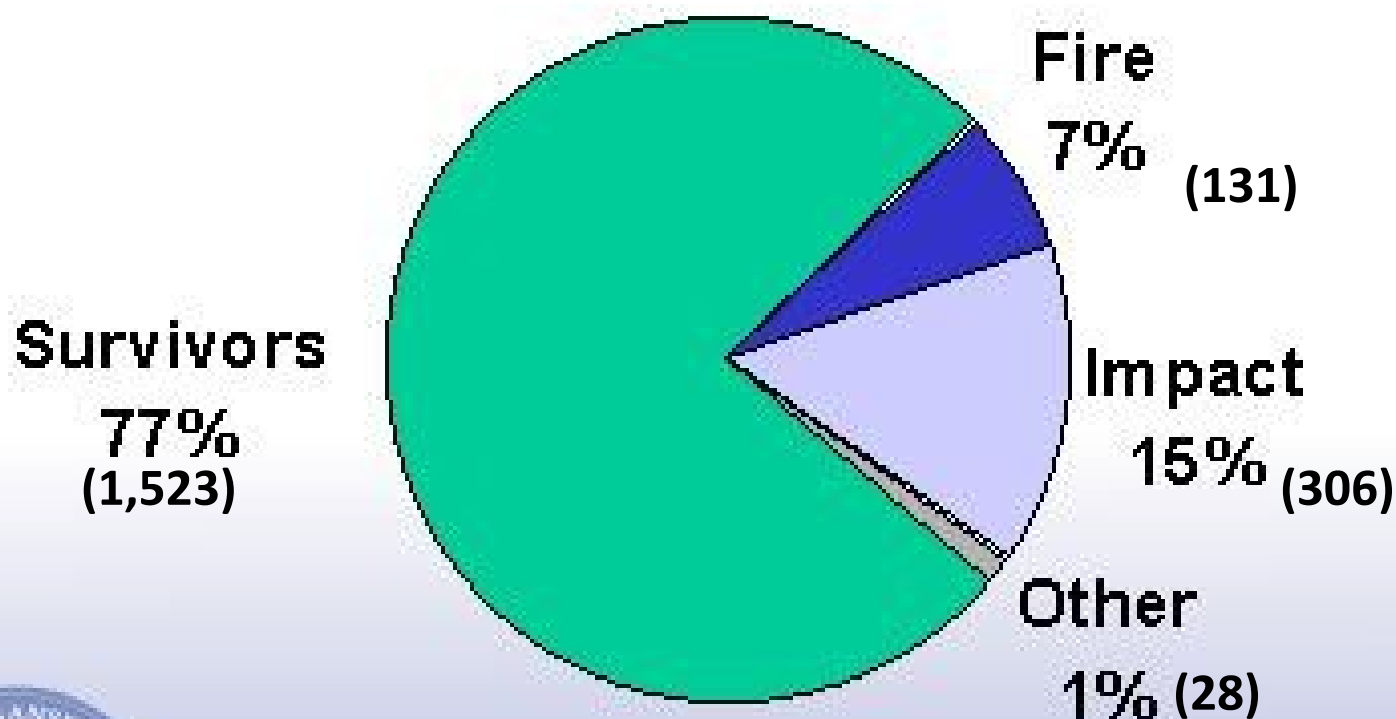
# Survivable Accidents

- Forces transmitted to occupants through their seat and restraint systems cannot exceed the limits of human tolerance for abrupt accelerations
- Structure in the occupants' immediate environment must remain substantially intact to the extent that a livable volume is provided throughout the crash



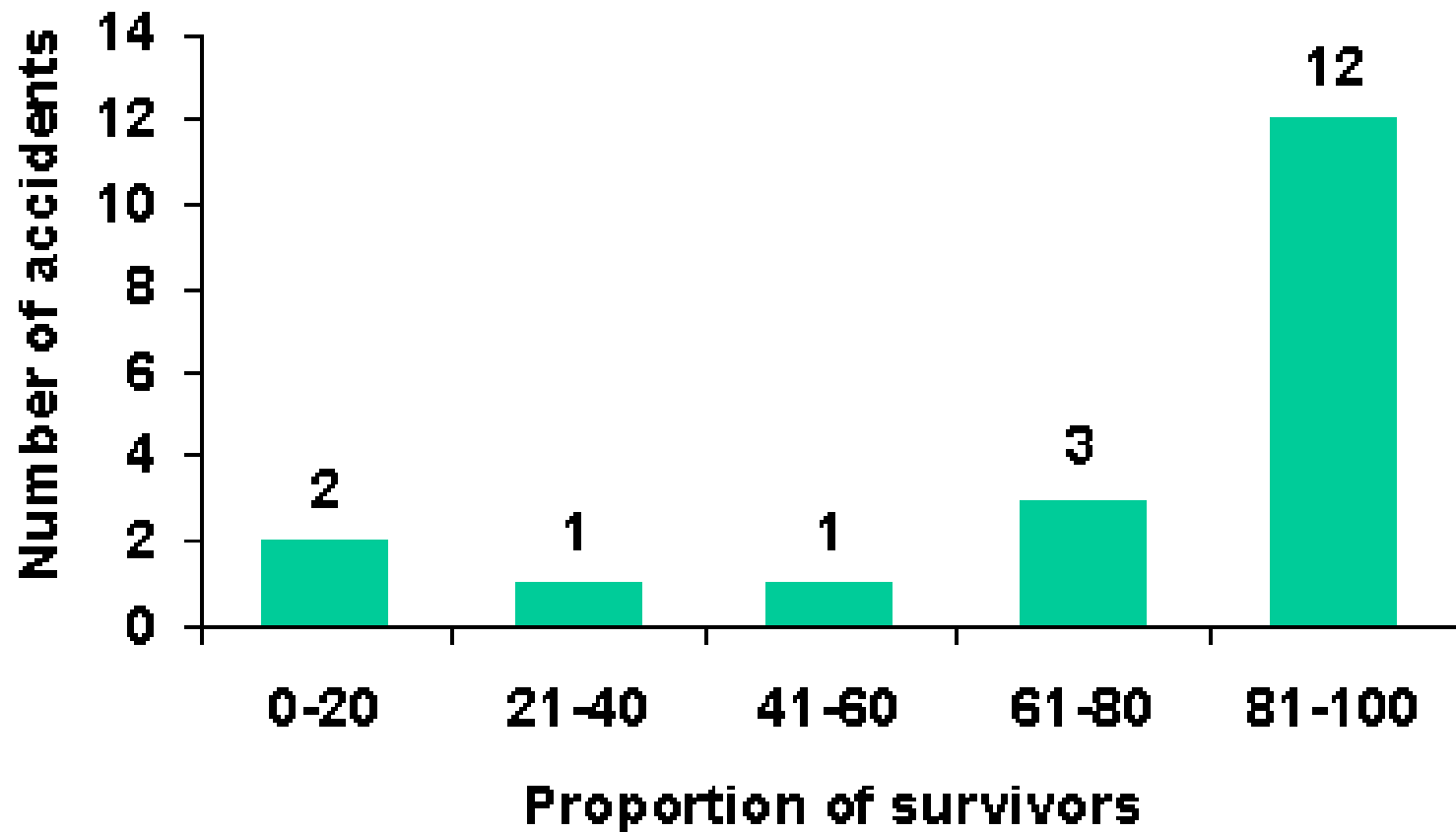
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# Occupant Survival for Survivable-Serious Part 121 Accidents



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# Number of Part 121 Serious-Survivable Accidents with Proportions of Survivors



# Conclusions

- 96 percent survive all accidents
- 56 percent survive serious accidents
- 77 percent survive serious-survivable accidents



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# Steps Passengers Can Take

- Plan escape routes
- Attend to safety briefings
- Read safety cards
- Follow crew instructions



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